

PERCEPTION OF CATTLE AND BUFFALO FARMERS TOWARDS COMPATIBILITY OF SELECTED DAIRY INNOVATIONS

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Abstract: The present study was conducted to know the perception of dairy farmers towards the attribute compatibility, of the selected nine dairy innovations. A total of 360 dairy farmers, who were first to adopt innovations suggested by the State Animal Husbandry Department from three districts of Andhra Pradesh i.e., Visakhapatnam, Krishna and Chittoor districts were selected for the study. Farmers perception on the attribute compatibility was measured in terms of situational and physical compatability through a scale developed by Nityasree and Siddaramaiah. Out of the nine recommended innovations, six innovations viz., package of practices for rearing heifers, pregnant, and lactating animals; feeding of area specific mineral mixture, strategies for enhancement of milk yield and quality, cultivation and feeding of azolla, use of ICT's in adoption of technologies and marketing strategies to improve milk sales were perceived to be situationally feasible and physically necessary by majority of the dairy farmers. The remaining three innovations i.e., formulation and feeding of complete feed blocks, cultivation and feeding of hydroponic fodder and use of milking machine were perceived to be situationally incompatible/not-feasible and physically unnecessary by a sizeable section of the respondents.

Keywords: Dairy Innovation, Dairy farmers, Perception, Attribute, Compatibility.

Introduction

Farmer's perception towards the attributes of dairy production technologies/innovations will mostly determine the nature and extent of their involvement and participation in acquiring and adopting the same. Oladele (2001). It has been very well testified in few pockets of the country that, application of dairy production technologies substantially increases the milk yield of dairy cattle Meena *et al.*, (2014). However, there still exists a wide gap between the technology available with the researchers and its adoption by the farmers. The most common causes for the technological gap are farmer's indifference/lethargy, ineffective extension system, inadequate input supply, credit support and inadequate market infrastructure Roy *et al.*, (2013). Farmers' perception towards the attributes of recommended technologies if studied can provide useful information and help in improving the adoption rate of these

technologies. Hence, the present study was undertaken to measure the perception of farmers towards the attribute 'Compatibility' of selected dairy innovations for adoption decisions.

Methodology

Data were collected from a sample of 360 dairy farmers hailing from all the three regions of Andhra Pradesh viz., North coastal, Coastal and Rayalaseema regions by selecting one district from each region i.e., Visakhapatnam, Krishna and Chittoor respectively. Three mandals from each district and two villages from each mandal were selected through simple random sampling technique. Out of the total 18 villages selected, 20 farmers from each village ranking best in the adoption of innovations as suggested by the State Animal Husbandry Department were finally included in the study.

In the present investigation 'Compatibility' is measured as the degree to which a particular dairy innovation is consistent with existing values and past experiences of the adopters and this attribute was studied under two sub-heads i.e., Situational compatibility and Physical compatibility. The perception of the respondents about the 'Situational compatibility' of dairy innovations in the present study is expressed in terms of 'feasible' or 'not feasible' while 'Physical compatibility' was measured in terms of the needs of the clientele and is expressed as 'necessary' or 'unnecessary' through the scale developed by Nityasree and Siddaramaiah (1996).

Results and Discussion

The results pertaining to perception of the dairy farmers regarding the attribute compatibility of dairy innovations were presented in Table-1 and Fig-1. Regarding compatibility, varied responses were noted among dairy farmers in terms of situational compatibility and physical compatibility. Majority of the dairy farmers felt that, package of practices for rearing heifers, pregnant and lactating animals were feasible to adopt (78.33%) and physically necessary (96.67%) while

Table 1: Distribution of dairy farmers according to their perception on compatibility of selected dairy innovations

Sl.No.	Category	Innovations																		
		1		2		3		4		5		6		7		8		9		
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
I	Situational compatibility	Feasible	282	78.33	47	13	313	87	12	3.3	318	88.33	47	13	296	82.2	336	93.3	234	65
		Not Feasible	78	21.67	313	87	47	13	348	96.7	42	11.67	313	87	64	17.8	24	6.7	126	35
II	Physical compatibility	Necessary	348	96.67	298	82.78	331	92	12	3.3	318	88.33	89	24.72	223	62	341	95	333	92.5
		Unnecessary	12	3.33	62	17.22	29	8	348	96.7	42	11.67	271	75.28	137	38	19	5	27	7.5

1 – Package of practices for rearing, heifers, pregnant and lactating animals

2 – Formulation and feeding of complete feed blocks.

3 - Feeding of area specific mineral mixture.

4 - Cultivation and feeding of hydroponic fodder.

5 - Cultivation and feeding of Azolla.

6 - Strategies for enhancement of milk yield and quality.

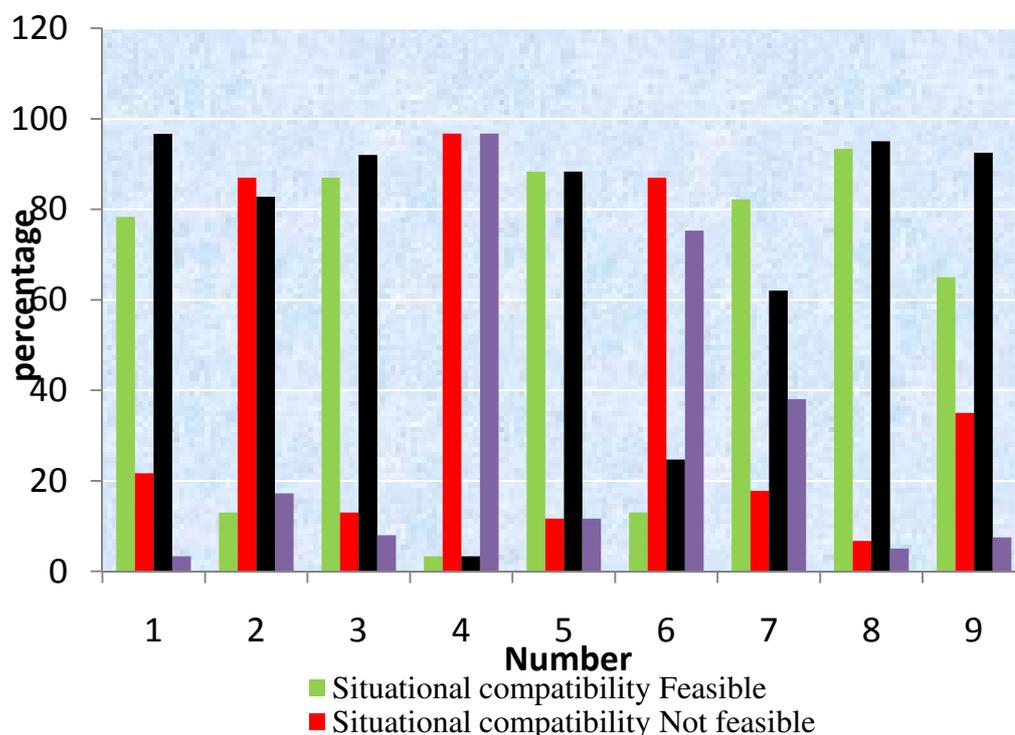
7 - Use of milking machine.

8 - Marketing strategies to improve milk sales.

9 - Use of information and communication technologies for adoption and diffusion of innovations.

N – Frequency % - Percentage

Fig-1 Distribution of respondents according to their perception on compatibility of recommended dairy innovations



formulation and feeding of complete feed blocks was found to be not feasible for adoption (87%) and physically unnecessary (92%) by majority of the dairy farmers. The practice feeding of area specific mineral mixture was perceived to be feasible (87%) and physically necessary (92%) by majority of the dairy farmers while cultivation and feeding of hydroponic fodder was perceived to be not feasible and physically not necessary (96.67%) by almost all the dairy farmers. Strategies for enhancement of milk yield and quality were perceived to be feasible and physically necessary (88.33%) by majority of the respondents while use of milking machine was felt not-feasible (87%) and physically unnecessary (75.28%) by most of the dairy farmers. Cultivation and feeding of azolla was found to be feasible (82.2%) and physically necessary (62%) by majority of the dairy farmers. The innovations use of ICT's for adoption and diffusion of technologies was perceived to be feasible (93.33%) and physically very necessary (95%) by almost all the dairy farmers. The technology marketing strategies to improve milk sales was perceived as feasible by nearly 2/3^{rds} of the respondents (65%) and felt physically very necessary by almost all the dairy farmers (92.5%).

The results of the study indicated that the innovations numbered 1,3,5,6, 8 & 9 were perceived to be situationally feasible and physically necessary by majority of the dairy

farmers. Those innovations which bring significant changes in the productivity of dairy animals, which increase sale price for milk, which have easy technical know how and result in venture specific initiatives were perceived to be compatible (Rezai *et al.*, 2011) by the dairy farmers. The innovations 2,4&7 were perceived to be situationally incompatible/not-feasible and physically un-necessary by a sizeable section of the respondents. High cost involved, incompatibility with farm and home situations, non reach to the technologies and high technical know how were the reasons attributed for non-adoption of these technologies.

Conclusion

The dairy farmers who possessed traits like vast experience, good decision making ability, better knowledge, innovative nature and reasonable economic motivation certainly perceived those innovations which are feasible and physically necessary to them. However, majority of them showed positive perception towards the recommended innovations. Hence, the study suggests for proper education to the farmers regarding the outcome on adoption of selected innovations through trainings, method and result demonstrations, awareness meetings and information communication technologies.

References

- [1] Meena M.S, Singh K.M, Malik B.S, Meena B.S and Kanwat M 2012. Knowledge index for measuring knowledge and adopting scientific methods in treatment of reproductive problems in dairy animals *Journal of Agricultural Science* 4(10): 81-88.
- [2] Nityasree D.A and Siddaramaiah B.S 1996. A scale to measure the perception of attributes of innovation. *Tropical Agricultural Research*, 8 pp 55-63.
- [3] Oladele O.I. 2001. Farmers perception of the relevance of livestock production technologies in oyo state, Nigeria *Live stock Research for rural Development*, 13(6).
- [4] Roy Deepa, Bandyopadhyay AK and Gosh A 2013. Identification of technological gap in pine apple cultivation in some selected areas of West Bengal, *Int. J. of Sci., Envir and Techno.*, 2(3):442-448.
- [5] Rezai Golnaz, Md. Zainalabidin and Md.nasir Shamsuddin 2011. Informal education and developing entrepreneurial skills among farmers in Malaysia. *World academy of Science, Engineering and Technology*. 79: 254-261.